Operating Instructions

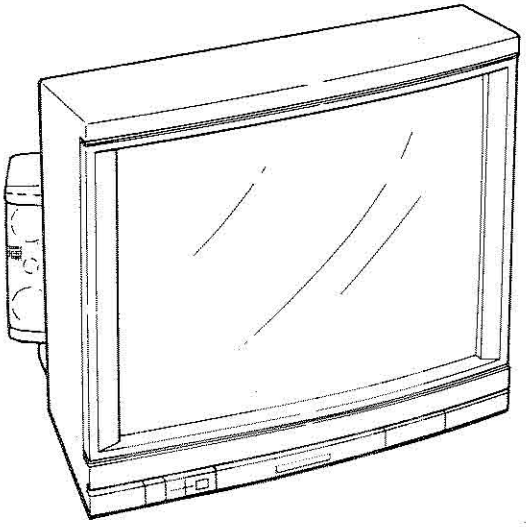
Hi-Fi MONITOR RECEIVER

SD-T292

RD/G
RD/Q
RD/Q1

NTSC/PAL/SECAM

BUILT-IN MTS DECODER



"Note to CATV system installer:
This reminder is provided to call the CATV system installer's attention to Article 820-22 of the NEC that provides guidelines for proper grounding and, in particular, specifies that the cable ground shall be connected to the grounding system of the building, as close to the point of cable entry as practical."

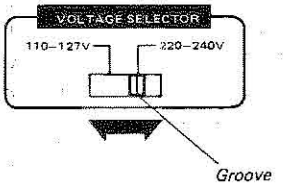
Your new Pioneer Hi-Fi Monitor Receiver incorporates a host of features designed to give you excellent performance if you follow the instructions in this manual. We recommend that you read the following instructions before turning on your Hi-Fi Monitor Receiver for the first time.

LINE VOLTAGE SELECTOR SWITCH

Only multi-voltage models are provided with this switch. U.S. and Canadian models are not provided with a voltage selector. Mains voltages in Saudi Arabia are 127 V and 220 V only.

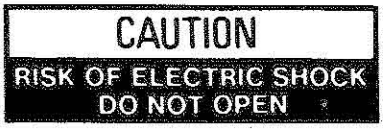
You will find the line voltage selector switch on the rear panel. Before your model is shipped from the factory, the switch is set to the power requirements of the destination; nevertheless, you should check that it is set properly before plugging the power cord into the AC wall socket. If the voltage is not properly set, or if you move to an area where the voltage requirements differ, adjust the selector switch as follows:

Before adjusting, disconnect the power cord.
Insert a medium-sized screwdriver into the groove of the selector switch and set it to the voltage value of your area.



IMPORTANT

The lightning flash with arrowhead, within an equilateral triangle, is intended to alert the user of the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



CAUTION:
TO PREVENT THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). NO USER SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

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The future of sound and vision.

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NOTICE BEFORE USE

INSTALLATION

Location

Select an area where sunlight or bright indoor illumination will not fall directly on the picture screen. Also, be sure that the location selected allows a free flow of air to and from the perforated back cover of the set.

To avoid deformation, color change and breakdown of the set, do not leave the set at a place where high temperatures are reached, for example, in direct sunlight or near a heating apparatus, etc.

Viewing

This Hi-Fi Monitor Receiver may be viewed from whatever distance you desire. Most viewers prefer a distance of six to twelve feet or more, depending on screen size, for maximum eye comfort.

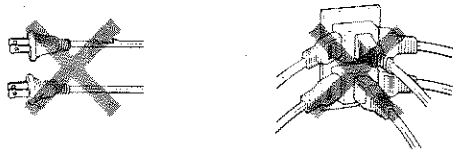
NEVER CONNECT THE Hi-Fi MONITOR RECEIVER TO OTHER THAN THE SPECIFIED VOLTAGE, NOR TO DIRECT CURRENT.

NOTE:
Never remove the back cover of the Hi-Fi Monitor Receiver as this can expose you to very high voltage and other hazards. If the set does not operate properly, unplug the set and call the nearest PIONEER authorized service center or your dealer.

POWER SUPPLY CORD

- When the power cord or plug is damaged or frayed, unplug this Hi-Fi Monitor Receiver from the wall outlet and refer servicing to qualified service personnel.
- Do not overload AC wall sockets and extension cords, as this can result in fire or electric shock.

• *DANGEROUS*



POWER-CORD CAUTION

Handle the power cord by the plug. Do not pull out the plug by tugging the cord and never touch the power cord when your hands are wet as this could cause a short circuit or electric shock. Do not place the unit, a piece of furniture, etc., on the power cord, or pinch the cord. Never make a knot in the cord or tie it with other cords. The power cords should be routed such that they are not likely to be stepped on. A damaged power cord can cause fire or give you an electrical shock. Check the power cord once in a while. When you find it damaged, ask your nearest PIONEER authorized service center or your dealer for a replacement.

PRECAUTIONS IN USE

Keep away from magnetic fields.

Generally, a large screen color TV will be affected by nearby magnetic forces or terrestrial magnetism.

A magnetic field can disrupt the color. Keep your set away from magnetic fields, including high power amplifiers, battery-operated toys, such as electric cars. When a speaker system is to be installed to one side of your Hi-Fi Monitor Receiver, keep it at least 50 cm (20 in) away.

When carrying your display

When moving your Hi-Fi Monitor Receiver, always disconnect the power plug first and move it gently so that it is protected from impact. Be especially careful of the front glass panel.

Install in a level place free of vibrations.

Do not install the set in an unstable position, such as in a location exposed to vibrations, a shaky platform or a titled platform. This is dangerous, since the Hi-Fi Monitor Receiver may fall.

Maintain the proper level of room brightness

Eye strain may be caused if the room lighting is much brighter or much darker than the TV screen. In the daytime, draw curtains to exclude direct sunlight.

When not using your set for a long time

When you are not going to use your Hi-Fi Monitor Receiver for a long time, such as when you go out or on a trip, for safety, disconnect the power plug from the outlet.

DO NOT

- Do not clean your screen or cabinet with a strong cleaner, polish or chemically-treated cloth.
- Do not place rubber or vinyl products or cellophane tape on your Hi-Fi Monitor Receiver.
- Do not forcefully handle the screen.

DO

- Dust the screen and cabinet with a soft cloth.
- Clean the screen with a soft cloth and warm water. Dry with a soft cloth. (Mild soap may be used if the screen is extremely dirty.)

TO CONSERVE ELECTRICITY

The MAIN POWER switch is provided in order to conserve electricity. When going to bed at night, or leaving home, the MAIN POWER switch should be set to off. When power is turned off by or the remote control unit TV POWER key, a small amount of electricity continues to flow through the display remote control receiver directly (the STANDBY indicator continues to light.)

FEATURES

SUPER-HIGH PICTURE QUALITY

With conventional displays, the absorption of external light by a front glass screen results in a deterioration of picture quality. In the Hi-Fi Monitor Receiver, however, the front glass has been eliminated through the use of a new tinted face, thus virtually eliminating transmissivity and greatly increasing contrast. The CRT forms a 29-inch, full-square screen, thus allowing extremely high image quality from edge to edge and corner to corner.
This Trident model can receive PAL, NTSC and SECAM TV broadcasts. This fully automatic selection system identifies the received signal, enabling you to use this receiver in another country where the broadcasting format is different.

16 Systems:
PAL (I, B/G, D/K), SECAM (I, B/G, D/K, K1), NTSC M, NTSC 3.58 (I, B/G, D/K), NTSC 4.43 (I, B/G, D/K) broadcast reception; NTSC-50 Hz, PAL-60 Hz playback.

Tuner Section:

- You can set this receiver to match various channel plans (U.S., U.S. CATV, CCIR, UK and Italy), enabling you to use it in many different countries.
- Built-in digital synthesizer U.S. MTS (multi-channel sound) tuner.
- Adaptable to CATV system, PLL (Phase Lock Loop) complete synchronous detection, 96-channel input key pad for U.S. and 95-channel input key pad for Europe.
- Off-the-air VHF, UHF, and cable (CATV) programs can be tuned directly for all channels by use of the remote control unit digit keys.

Video and Deflection:

- With the newly developed cathode-ray tube, comb filter, and wide-band video circuitry, a horizontal resolution of 700 lines NTSC only (frequency response 9 MHz) is obtained.
- The use of a color contour circuit (CTI) extends the apparent color band from 500 Hz to 2 MHz and vastly improves the color transition contours.

SIMPLE DESIGN WITH EMPHASIS ON EASY VIEWING

Operation controls and dials have been enclosed within the front panel. The simple design allows the unit to serve as a display center for various applications.

MULTIPLE INPUT AND OUTPUT TERMINALS

In order to allow the display to respond to multiple applications, two sets of input terminal have been provided.

OPERATION INDICATION

Digital reproduction technology provides a DISPLAY indication of the channel number on screen.

SYSTEM REMOTE CONTROL UNIT

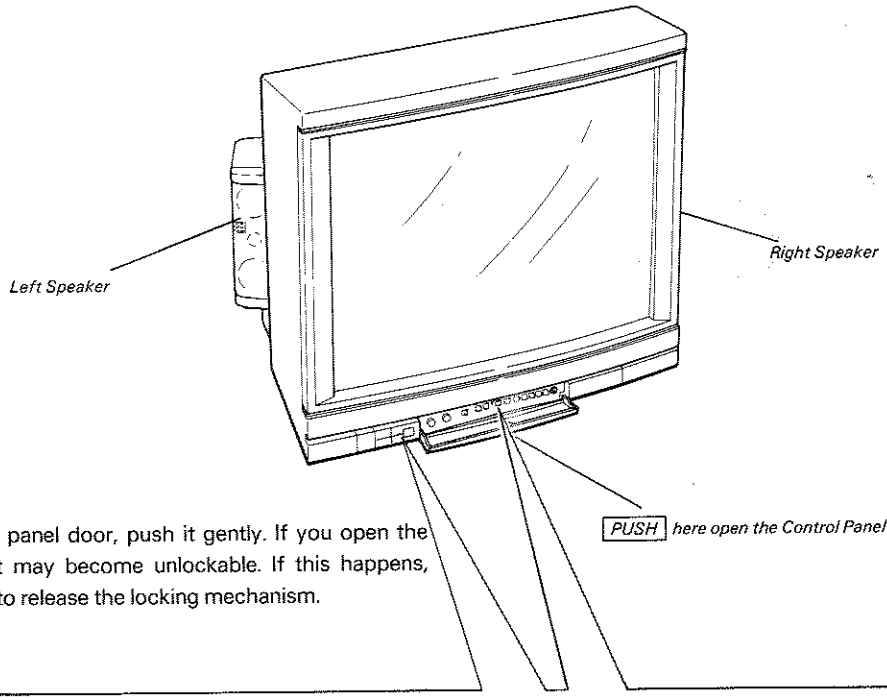
Virtually all functions, including power, channel selection, and volume can be operated at a distance by the remote control unit. This remote control unit can also be used to operate Pioneer's LD players with the SR mark (basic operation only).

FUNCTIONS AND ACCESSORIES

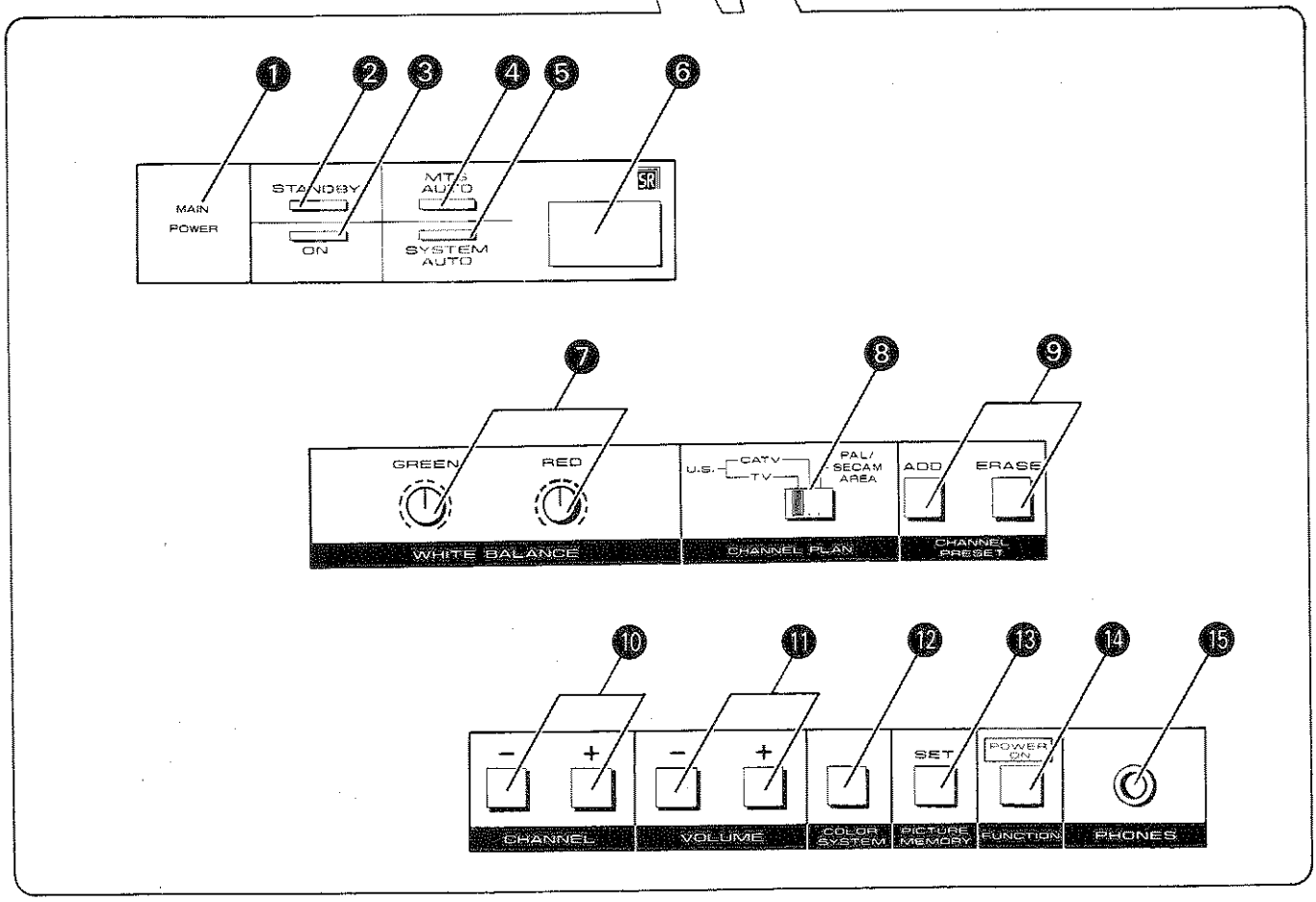
- The more components used in combination, the more varied the possible applications. Perfect for AV (Audio/Video) systems.
- Two Audio/Video input terminals and Monitor/Audio output terminals for response to multiple Audio/Video applications.
- Incorporates S-VIDEO input jack handling separated brightness and color image signals for S VHS or ED β VCR as well as S adaptable LD players, etc.
- White balance control for free adjustment of overall picture quality impression.
- Vertical-twin separate two-way speaker system provides fullbodied low-frequency sound quality.

FRONT PANEL FACILITIES

- For details on operation of the remote control unit, see pages 10, 11 and 12.



Caution:
To open the control panel door, push it gently. If you open the door by pulling it, it may become unlockable. If this happens, push the door again to release the locking mechanism.



❶ MAIN POWER switch
Turn on this switch before using the remote control unit. The red STANDBY indicator lights to indicate that the main power is on. When the main power is on, the Hi-Fi Monitor Receiver is in the power standby mode and no picture will be seen. Turn off the MAIN POWER switch if the display unit will remain unused for a long time.

❷ STANDBY indicator
When the MAIN POWER switch is pressed, this red indicator lights up to indicate that the unit is in the power standby mode.

❸ POWER indicator
This green indicator lights up when the unit is turned on.

❹ MTS AUTO indicator
This indicator lights when MTS broadcast reception is possible. (See page 17.)
(MTS : Multichannel TV Sound)

❺ SYSTEM AUTO indicator
This receiver can automatically identify an incoming signal in accordance with the TV broadcasting format (NTSC, PAL and SECAM) used in the receiving area. This indicator lights when the SYSTEM selector is set to "SYSTEM:AUTO," so the format of the received signal will be identified, and the receiver will switch over to that format.

❻ Remote sensor SR
When using the remote control, point its transmitter end toward this sensor.

❼ WHITE BALANCE control knobs
White balance is the term expressing the quality of the color white on a white screen. When viewing video camera recordings with improper white balance, adjust both the red and green control knobs until you achieve proper color quality.

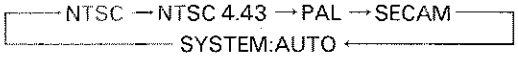
❽ CHANNEL PLAN selector switch
You can set this selector switch to one of three positions in accordance with the broadcast channel plan used in your area. Set it as follows:
U.S., CATV: To receive a North American CATV HRC & standard channel plan broadcast.
U.S., TV: To receive a North American off-the-air U.S. TV channel plan.
PAL/SECAM AREA: To receive a European (PAL/SECAM) channel plan broadcast.

❾ CHANNEL PRESET buttons
ADD: Press this button to store the currently selected channel in memory.
ERASE: Press this button to delete the tuned in channel from memory.

❿ CHANNEL selector buttons (—, +)
To select a PRESET channel, press the CHANNEL "+" or "—" button. To select a higher channel number, press the "+" button. To select a lower channel number, press the "—" button.

⓫ VOLUME control buttons
The sound volume can be judged by the number of colored arrows (< < <. . .) displayed on the screen when one of the buttons is pressed.
Press the "—" button to decrease sound volume.
Press the "+" button to increase sound volume.

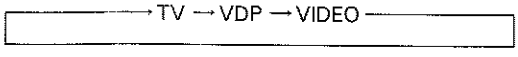
⓬ COLOR SYSTEM selector
This switch is used to set the receiver in accordance with the TV broadcast format used. Each time it is pressed, the set format will change sequentially. Nomally, set it to "SYSTEM:AUTO." If you are in a poor reception area, however, confirm the format used in that area, then set the switch to that position.



NOTE:
If the SECAM color system is received when the COLOR SYSTEM selector is set to "SYSTEM: AUTO", the color on the screen may flicker. In technical terms, this indicates that the chroma line burst signals are not being transmitted from the broadcasting station.
In such a case, set the COLOR SYSTEM selector to "SECAM".

⓭ PICTURE MEMORY SET button
Press this button to memorize the desired picture quality: First, use the PICTURE adjustment mode selector key on the remote control unit to adjust the picture quality. Then select PICTURE MEMORY-1 or -2 and finally press this key. (See page 19.)

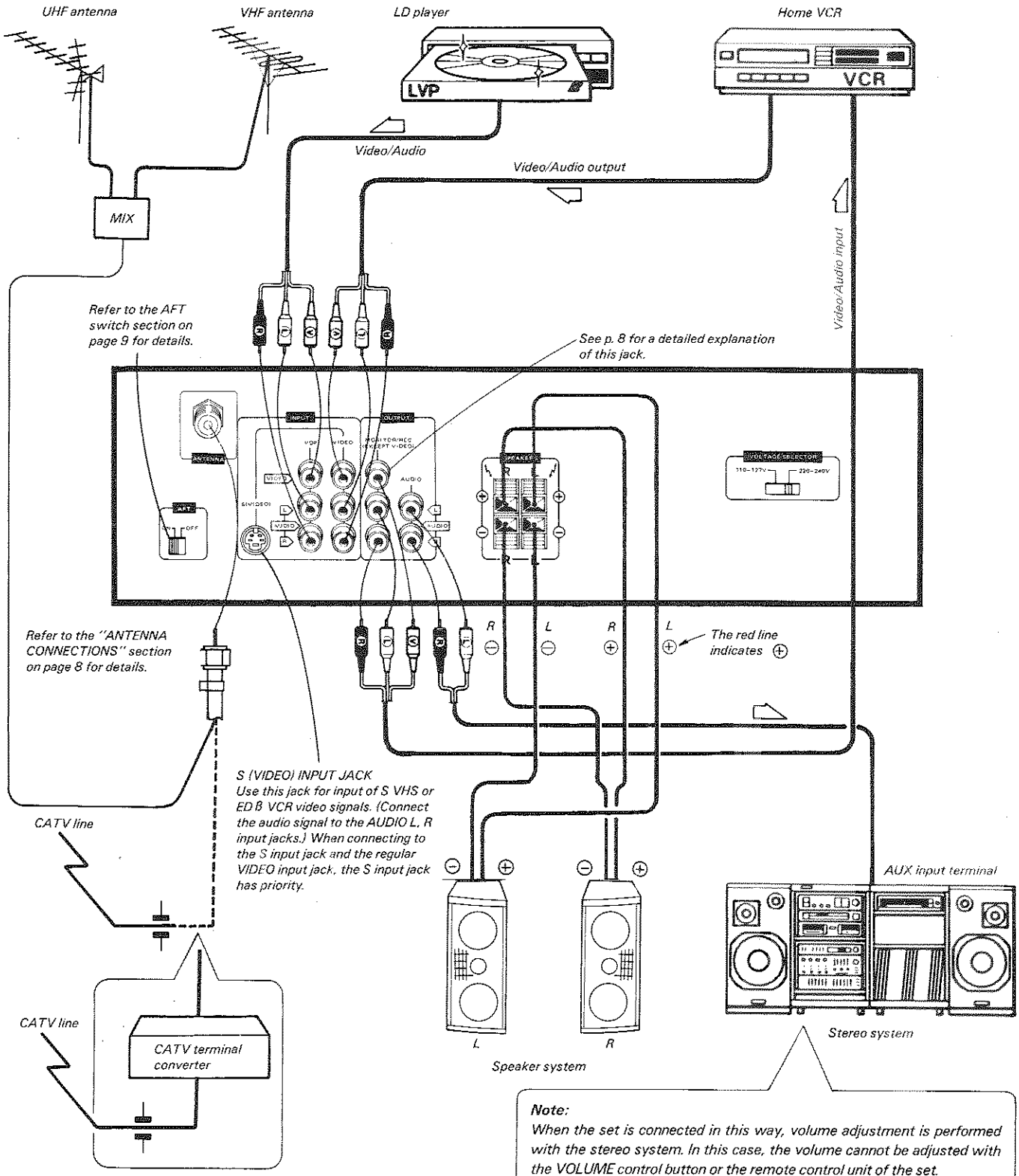
⓮ FUNCTION POWER ON selector button
This selector serves two functions: as an input selector and as a POWER ON switch when the unit is in the standby mode. If the selector is pressed after the unit has been set to the standby mode (red STANDBY indicator lights) by pressing the MAIN POWER switch, the TV will be turned on for operation and automatically set to the input source selected before it was turned off. Each time this selector is pressed, the input function will be switched in the following order:



⓯ PHONES jack
When a stereo headphone plug (6 mm dia.) is inserted here, the sound will be switched from the speakers to the headphones.

CONNECTIONS

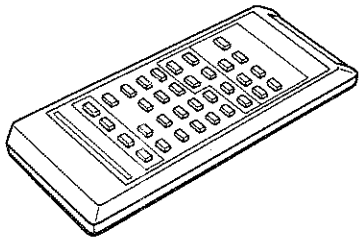
For details regarding the connections of the various components, consult the Operating Instructions for the respective components.


UHF antenna
VHF antenna
LD player
Home VCR
LVP
VCR
Video/Audio
Video/Audio output
Video/Audio input
MIX
Refer to the AFT switch section on page 9 for details.
See p. 8 for a detailed explanation of this jack.
Refer to the "ANTENNA CONNECTIONS" section on page 8 for details.
R
L
R
L
The red line indicates ⊕
S (VIDEO) INPUT JACK
Use this jack for input of S VHS or ED B VCR video signals. (Connect the audio signal to the AUDIO L, R input jacks.) When connecting to the S input jack and the regular VIDEO input jack, the S input jack has priority.
CATV line
CATV line
CATV terminal converter
AUX input terminal
Stereo system
L
R
Speaker system

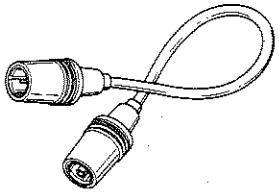
Note:
When the set is connected in this way, volume adjustment is performed with the stereo system. In this case, the volume cannot be adjusted with the VOLUME control button or the remote control unit of the set.

ACCESSORY PARTS

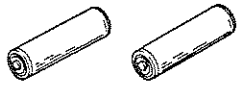
- Remote control unit 1



- PAL → F plug convert cable 1
  (Use when the antenna terminal in the receiving area is PAL.)



- Dry cell batteries "AAA" size
  IEC R03 (UM-4) 2



INSERTING BATTERIES IN THE REMOTE CONTROL UNIT

The remote control unit is located inside the packing box. Take out the remote control unit and insert batteries as described below:

① Open the battery compartment lid on the bottom side of the remote control unit. The lid will open easily if you slide it toward the bottom while pressing it with your thumb.

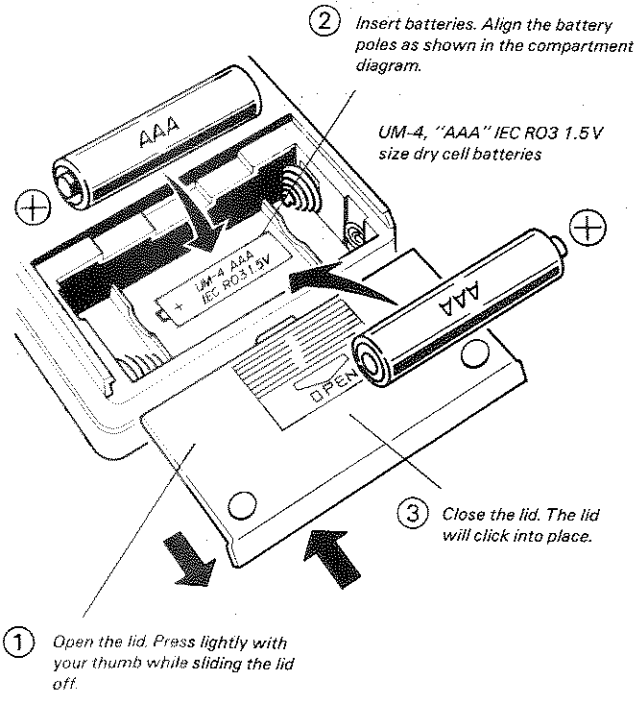
② Insert the two accessory "AAA" batteries in the case, taking care to correctly match the polarities as shown in the compartment.

③ Close the lid. The remote control unit has no independent ON/OFF switch.

NOTES:

- *When not using the remote control unit for long periods of time (one month or more), remove the batteries from the remote control unit to prevent any possibility of battery leakage in the compartment.*
- *Never use old and new batteries together. When replacing batteries, always replace the two old batteries with two new ones.*
- *Do not lay books or other objects on top of the remote control unit. The operation keys may be depressed, causing a continuous flow of battery power.*

INSERTING BATTERIES

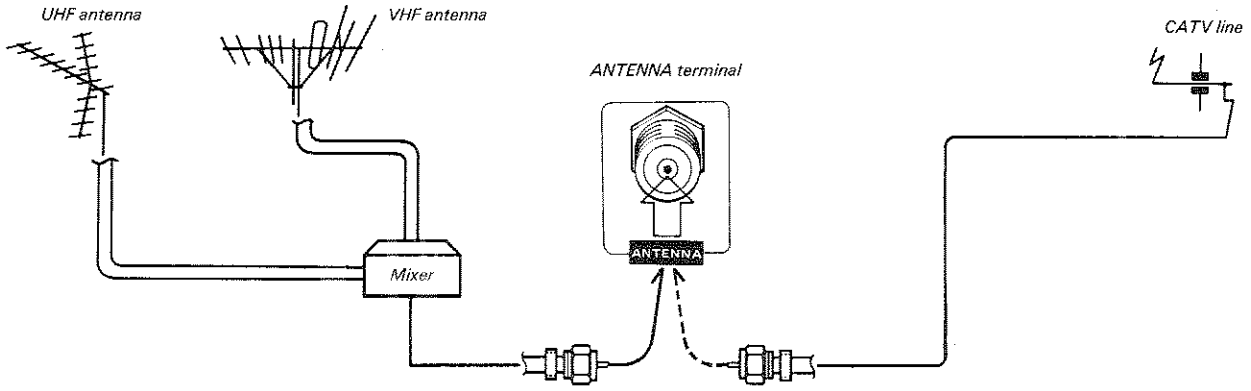

② Insert batteries. Align the battery poles as shown in the compartment diagram.
UM-4, "AAA" IEC R03 1.5V size dry cell batteries
AAA
UM-4 AAA IEC R03 1.5V
AAA
OPEN
③ Close the lid. The lid will click into place.
① Open the lid. Press lightly with your thumb while sliding the lid off.

ANTENNA CONNECTIONS

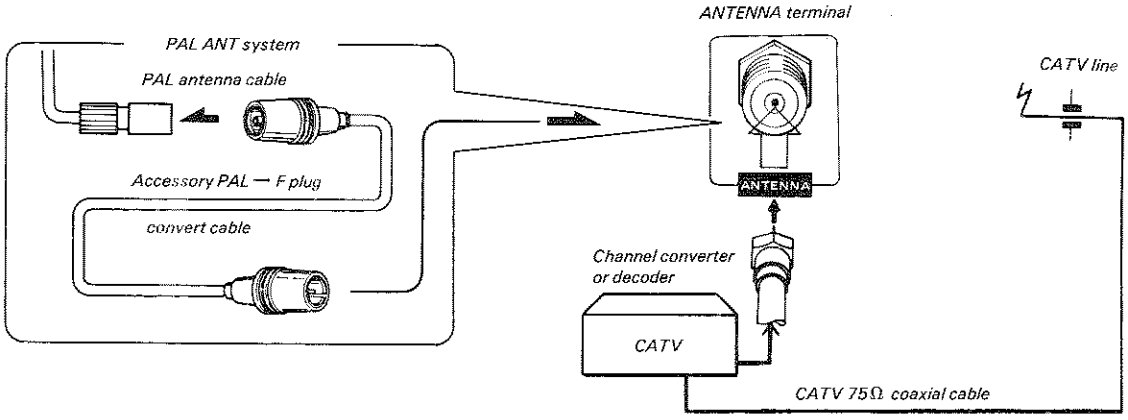
The picture quality of color programs and the sound quality largely depend on the outdoor antenna. Choose an antenna that is proper for your area and set it up properly. Because antenna choice and installation require some technical knowledge, ask your local dealer for advice.

When connecting the outdoor antenna or the CATV to the ANTENNA terminal:

When using an outdoor UHF and VHF antennas or cable (CATV) with 75 Ω coaxial cable lead, connect directly to the ANTENNA terminal.



When connecting the CATV channel converter or decoder (for pay-TV output) to the ANTENNA terminal:

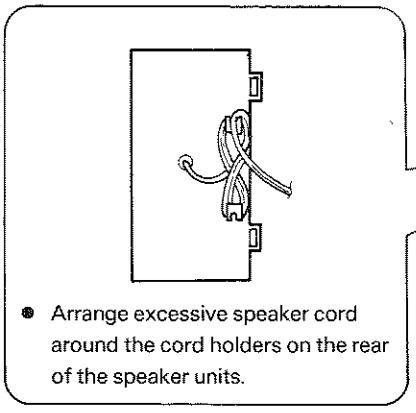


MONITOR/REC (EXCEPT VIDEO) OUTPUT TERMINAL

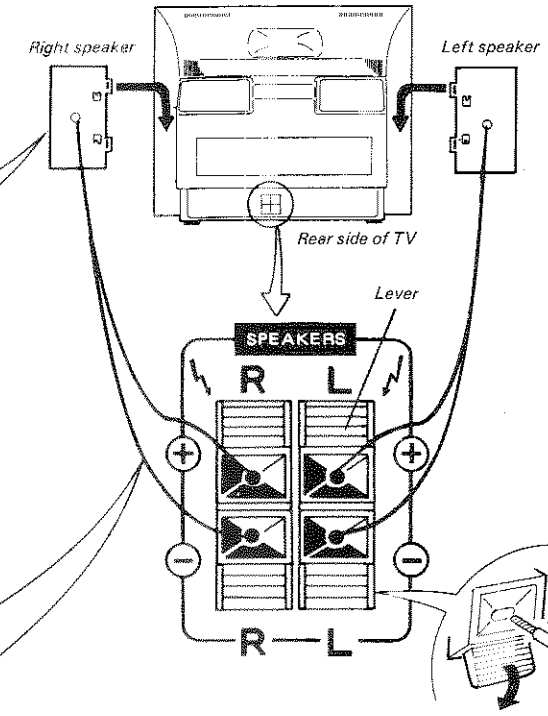
The inscription (EXCEPT VIDEO) appears above the OUTPUT jack for VIDEO on the rear panel, indicating that the VCR signal corresponding to video input is not output at this jack. This jack should be regarded principally as the picture recording output terminal for VCR.
A VCR is so constituted that the input signal is simultaneously output by the VCR itself, which results in undesirable oscillation.
In order to prevent such oscillation, the unit is constructed so that the video signal does not emerge, hence the inscription (EXCEPT VIDEO). This design feature permits simultaneous VCR connection.

SPEAKER CONNECTIONS

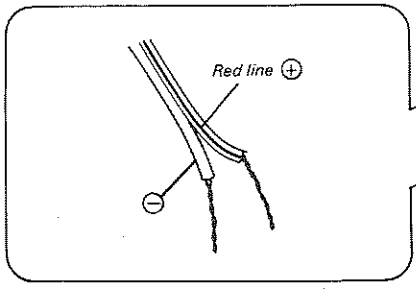
1. Attach the speakers by hooking them onto the screws at both sides of the TV.



- Arrange excessive speaker cord around the cord holders on the rear of the speaker units.



2. Connect the speaker wires to the left and right speaker terminals.



Remove your finger from the lever, and gently pull on the wire to confirm that it is securely connected.

- Connect the wire with the red line to ⊕. Insert the wire while pressing down the lever.

<Precautions regarding connections>

- Be sure that no speaker wire protrudes and contacts other than its own terminal.
- Be sure to correctly connect the RIGHT and LEFT speakers, and the + and — polarities. If the polarities of one of the speakers are connected improperly, the right and left speakers will operate in reverse phase, and the sense of stereo sound will be lost.

NOTES:

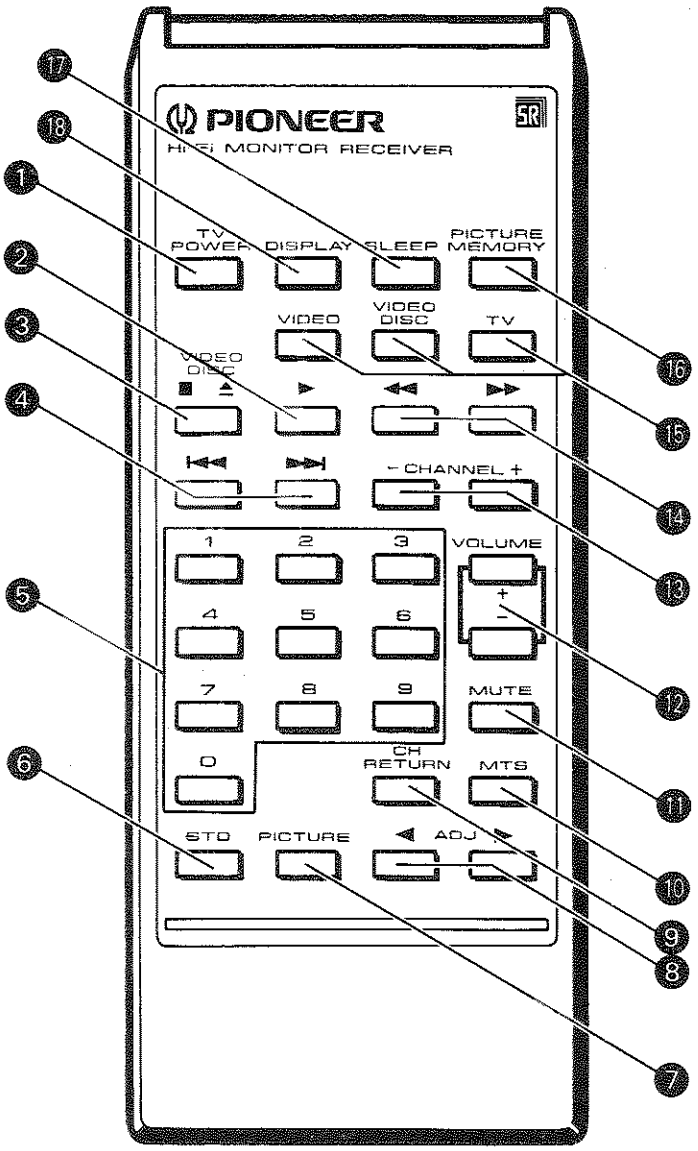
- *Use speakers with impedance in the range of 8-16 ohms.*
- *If speakers that are not magnetically shielded are placed close to the sides of the unit, the magnetic influence may disturb the color of the display. In this event, move the speakers at least 50 cm (20 in.) away from the sides of the Hi-Fi Monitor Receiver unit.*

AFT SWITCH

Normally, leave it in the ON position. When the RF output frequency of a VCR or TV game is greatly variant, affecting reception, adjust as follows;

1. Set the FUNCTION selector to TV.
2. Set the AFT switch to OFF.
3. Adjust the output frequency of the RF modulator of the VCR or TV game so that a normal picture is received on the Hi-Fi Monitor Receiver screen.
4. Set the AFT switch to ON again.

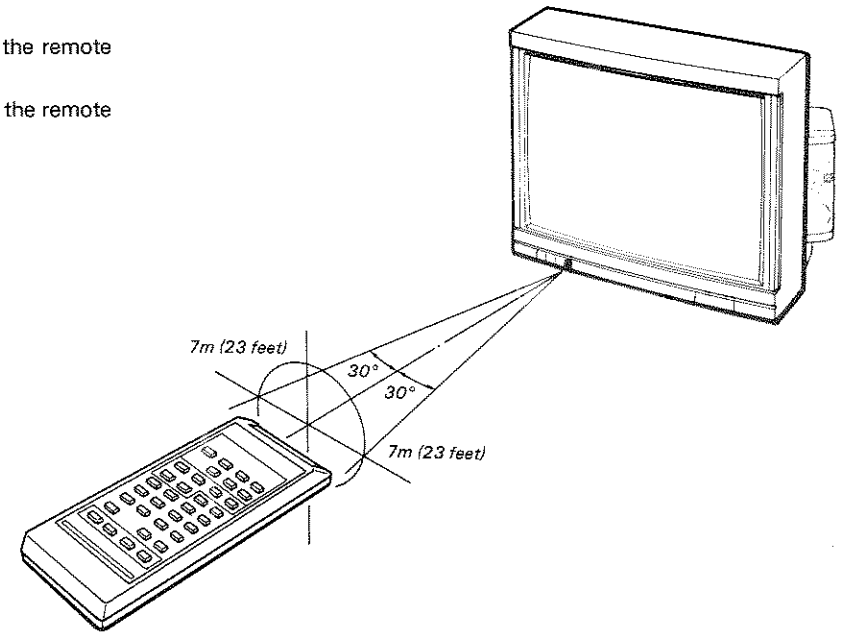
REMOTE CONTROL UNIT FACILITIES AND OPERATIONS



Remote Control Unit Operable Area

Distance: Approx. 7 meters (23 feet) or less from the remote sensor of the main unit.

Angle: Within 30° from the line perpendicular to the remote sensor.



❶ TV POWER key
When this key is pressed with the Hi-Fi Monitor Receiver MAIN POWER switch on, the Hi-Fi Monitor Receiver enters the operating mode.

LD player control keys
<VIDEO DISC>

❷ PLAY key (▶)
Pressing the play key once sets the unit in the play mode.

❸ Stop/eject key (■/ ⏏)
Pressing the stop/eject key once stops the operation. To eject the disc, press the same key again.

❹ Chapter skip keys (⏮, ⏭)
This function can be used to skip material as far as the start of the next chapter or to repeat playback from the start of the chapter now being played back.

⏭ **side:** Skip to start of next chapter.
⏮ **side:** Skip to start of chapter currently being played.
This key can be used to operate with LD Players with CHAPTER SKIP function.

❺ Ten channel call keys
These keys can be used to directly select the channel you wish to watch.

❻ Standard (STD) key
When this key is pressed, the picture is reset to the standard adjustment values.

❼ PICTURE adjustment mode selector key
By pressing this key consecutively, the various picture adjustment modes can be selected.
The model for the PAL/SECAM system is not equipped with the TINT function.

→ COLOR → (TINT) → CONTRAST → BRIGHTNESS →
SHARPNESS ←

❽ Picture ADJ. keys (◀, ▶)
This key is used to perform fine tuning of the picture. The adjustment mode is selected with the PICTURE key.

❾ CH RETURN key
Pressing the CH RETURN key selects the previous channel (the one selected before current channel). Pressing this key again recalls the current channel.

❿ Multichannel Television Sound (MTS) key
Pressing this key allows you to switch audio multiple modes (MAIN, SAP or MAIN/SAP). [U.S. only]

→ MAIN → SAP → MAIN-SAP → MONO →

- When MONO mode is selected, MTS AUTO indicator does not light up.

⓫ MUTE key
Press this key to temporarily turn off the sound. The indication appears in red. To return the sound to its previous level, press the key once again.

⓬ Sound VOLUME keys
Press these keys to adjust the sound volume.

⓭ CHANNEL selector keys (— CHANNEL +)
These keys are pressed to select a memorized TV channel.

⓮ Scan keys (◀◀, ▶▶)
When the unit is in the play mode, pressing the ◀◀ side sets the unit in the fast-reverse mode; the ▶▶ side, in the fast-forward mode.

⓯ Function selector keys (VIDEO, VIDEO DISC, TV)
Press these keys to select a video component, video disc player, or television.

⓰ PICTURE MEMORY recall key
Press this button to recall a memorized picture quality. Each time it is pressed, the picture quality will change as follows.

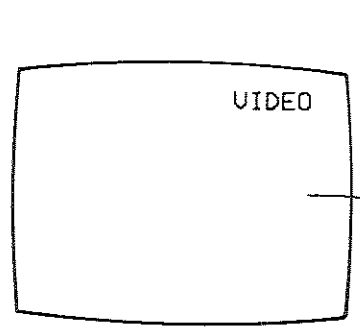
PICTURE MEMORY
→ 1 → 2 → <OFF> →

⓱ SLEEP selector key
By pressing this key, the Hi-Fi Monitor Receiver can be set to turn off (to the standby mode) automatically after 90, 60, or 30 minutes.

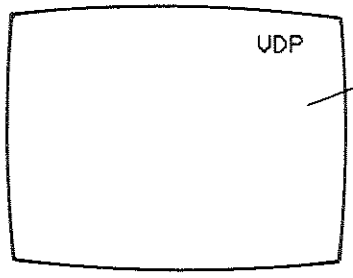
⓲ DISPLAY call key
To display the TV channel, input selector, and other functions on the screen, press this key. The indication appears in yellow. When the key is pressed again, the display disappears from the screen.

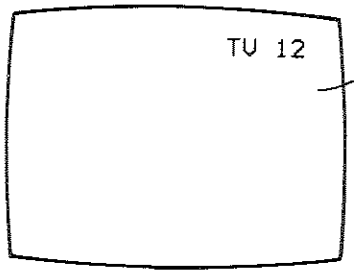
USING THE SCREEN DISPLAY WITH THE REMOTE CONTROL UNIT

The following displays will appear on the Hi-Fi Monitor Receiver screen for several seconds by operating various keys on the remote control unit.

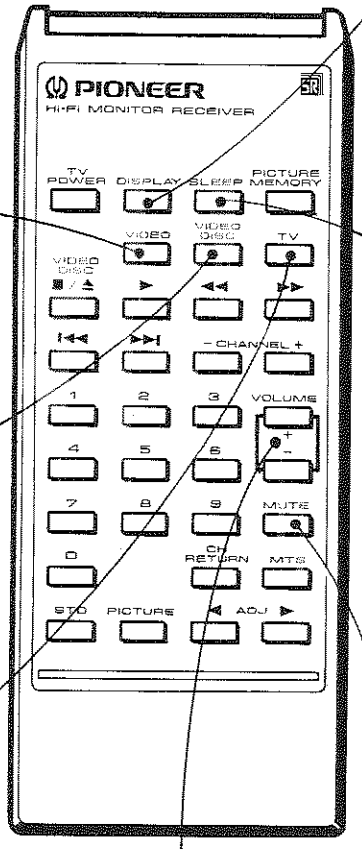


During VIDEO playback





During television broadcast reception

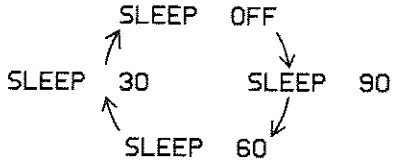


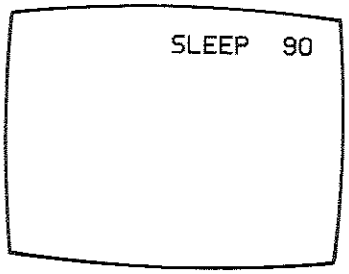
DISPLAY key:

When this key is pressed, the status of current TV channel, function selector, and MTS mode are displayed in yellow on the screen and can thus be checked.

SLEEP:

Each time the SLEEP key is pressed, the display switches from SLEEP 90 to SLEEP 60, SLEEP 30, and OFF. Press the key so as to set the timer to the desired sleep time. After starting the sleep timer operation, the time set will decrease as time goes by (e.g. 90... 60...). When the display changes from SLEEP 1 TO "OFF", the power is automatically turned off, and the display unit enters the power standby mode. To cancel the function, press the key until the "OFF" indication appears.





This key does not turn off components which are connected to the Hi-Fi Monitor Receiver, such as an additional amplifier.

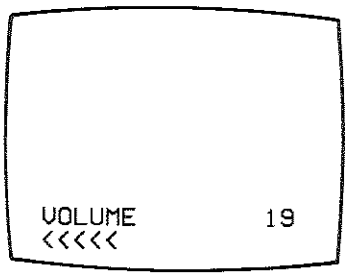
VOLUME adjustment:

The sound volume can be judged by the number of arrow (<<<<. . .) displayed on the screen.

Press the "—" key to decrease sound volume.

Press the "+" key to increase sound volume.

When the volume key is pressed, the VOLUME indication appears on the screen, showing the increase/decrease of sound volume with arrows and a numeric display. The maximum number of arrows is 16 and the maximum number is 63.

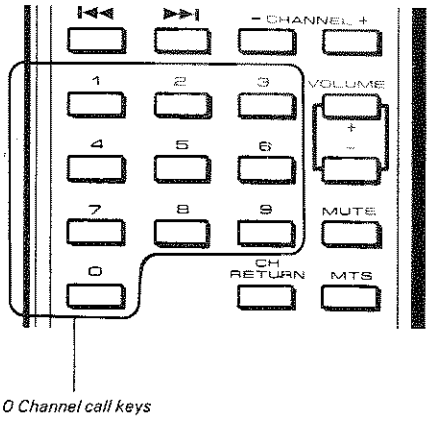


MUTE key

When the MUTE key is pressed, the sound is silenced. The sound volume before the MUTE key was pressed is displayed in red arrows on the screen. When the key is pressed again, the MUTE mode is cancelled.

CHANNEL SELECTION FOR RECEPTION

This set is equipped with a frequency synthesizer (FS) electronic tuning system. A total of 96 channels for the U.S. and 95 channels for European can be selected and tuned: Broadcast channels 2—13 (VHF), 14—69 (UHF) and cable (CATV) channels 1—13 (VHF), 14—22 (mid-band), 23—36 (super-band), and 94—99 (mid-band).
Channel selection is made by using the CHANNEL selector keys and 10 channel call keys (on the remote control unit). The keys numbered 0—9 are used for direct channel selection. The keys marked "+" and "—" are used for PRESET channel selection. PRESET channels will appear in sequence.



10 Channel call keys

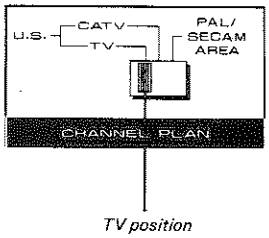
Preset Channel Selection
Set the CHANNEL PLAN selector to U.S. or PAL/SECAM AREA, in accordance with the intended receiving area.
U.S.: United States TV or CATV
PAL/SECAM AREA: Europe

OFF-THE-AIR (TV) CHANNEL SELECTION

1. **Select the "TV" position with the FUNCTION selector button or by the Function selector key of the remote control unit.**

2. **Set the CHANNEL PLAN selector switch to the "U.S. TV" or "PAL/SECAM AREA" position after opening the control panel door of the Hi-Fi Monitor Receiver.**

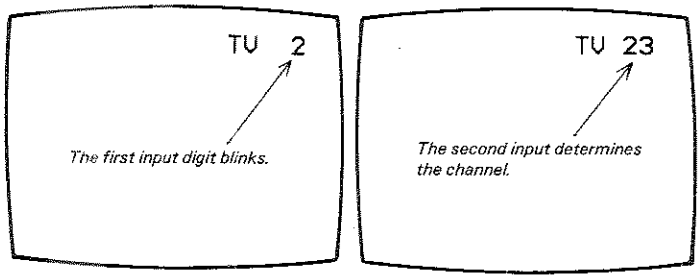
[Control panel]



TV position

[Example for U.S. TV]

3. **Direct Channel Selection**
Channel selection of all VHF (2—13) and UHF (14—69) channels may now proceed by entering the desired channel number from the 10 channel call keys. For example, to receive channel "23", press 2 and then 3 in sequence. Single-digit channels (2—9) may be selected by pressing 0 followed by the channel number (eg: 05, 09, etc.). The new channel selection will appear immediately. Single-digit channels may also be selected without pressing the number 0.
Using this method, there is an automatic 4-second delay before the new channel selection appears.



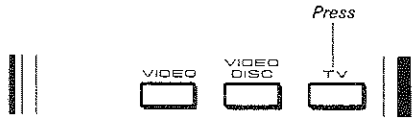
4. **Those channels memorized with the preset function can be selected with the following operation:**

Press to select higher-numbered channels.
Press to select lower-numbered channels.

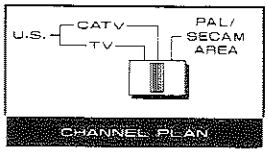
For details, refer to the section "TV CHANNEL SELECTION PROCEDURE" on page 16.

CABLE (CATV) CHANNEL SELECTION

1. Press the TV key (one of the Function selector keys).

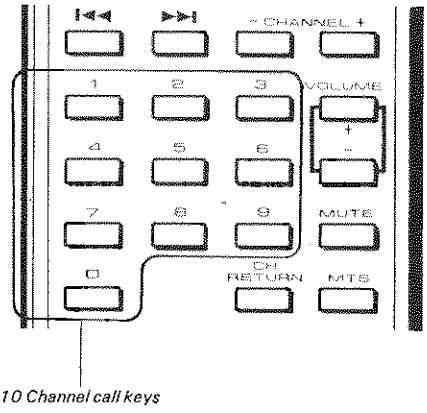


2. Open the control panel door of the Hi-Fi Monitor Receiver and set the CHANNEL PLAN selector switch to "CATV."



3. Direct Channel Selection

Enter the desired channel number from the 10 channel call keys for channel selection of VHF channels (1—13), mid-band channels (A-6 to A-1, A to I) and super-band channel (J to W). Operation of direct channel selection for cable channels is the same as described in the preceding section, [OFF-THE-AIR (TV) CHANNEL SELECTION] with the following exception: Channel numbers 00, and 37 through 93 are unassigned. If these numbers are selected the channel remains unchanged.



4. Preset Channel Selection

Those channels memorized with the preset function can be selected by the following means:

For details, refer to the section "CHANNEL MEMORY SETTING" on page 16.

CABLE (CATV) CHANNEL ASSIGNMENT

Channel number assignment for the cable tuning mode begins with 01 through 36, omits the unassigned numbers 37 through 93, then proceeds from 94 through 99. The specific channel number assignments and the corresponding alphabetical designation are shown below in the channel table.

	VHF L	MID		VHF	SUPER		UHF
TV	2 — 6	—		7—13	—		14—69
CATV	2—6 (STD)	A-6 (94)	A (14)	7—13	J (23)	Q (30)	
		A-5 (95)	B (15)		K (24)	R (31)	
		A-4 (96)	C (16)		L (25)	S (32)	
		A-3 (97)	D (17)		M (26)	T (33)	
		A-2 (98)	E (18)		N (27)	U (34)	
	1 — 6 (HRC)	A-1 (99)	F (19)		O (28)	V (35)	
			G (20)		P (29)	W (36)	
			H (21)				
			I (22)				

For example: Channel number "14" corresponds with mid-band cable channel "A."

NOTE:

Cable (CATV) services can vary from area to area. The channel number assignments shown in the channel table may not correspond with the channel numbers used by your local cable company. Direct tuning to cable channels without the use of the cable company "converter" or "preselector" will depend on the specific channels in use by the cable company. Direct tuning to cable channels is limited to unencoded (unscrambled) channels only. Check your local cable company compatibility requirements.

PAL/SECAM AREA Reception Band Chart I

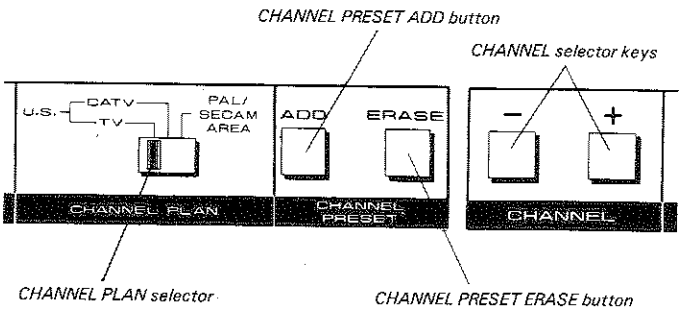
	VHF L	MID	VHF H	SUPER	UHF
C.C.I.R. TV ch	2 — 4	—	5 — 12	—	21 — 69
C.C.I.R. CATV ch.	E2 — E4	X(75) Y(76) Z(77) Z_{+1}(78) Z_{+2}(79) S_1(80) S_2(81) S_3(82) S_4(83) S_5(84) S_6(85) S_7(86) S_8(87) S_9(88) S_{10}(89)	E5 — E12	S_{11}(90) S_{12}(91) S_{13}(92) S_{14}(93) S_{15}(94) S_{16}(95) S_{17}(96) S_{18}(97) S_{19}(98) S_{20}(99)	—
Italy ch.	A(3), B(4), C(77)	—	D(5), E(6) F(16), G(9) H(10), H1(11) H2(12)	—	—
Ireland ch.	A(71), B(3), C(4)	—	D(5), E(6) F(7), G(17) H(18), J(11)	—	—

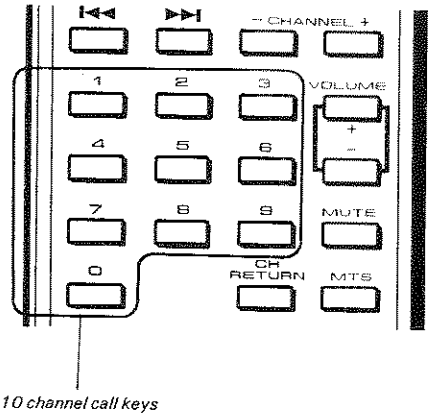
PAL/SECAM AREA Reception Band Chart II

	VHF L	MID	VHF H	SUPER	UHF
OIRT ch.	R1(2), R2(73) R3(76), R4(77) R5(1)	—	R6(5), R7(6) R8(7), R9(17) R10(18), R11(11) R12(12)	—	—
Morocco ch.	E2(2), E4(4)	—	M4(88), M5(13) M6(14), M7(7) M8(8), M9(9) M10(10), E5(5) E8(8), E12(12)	—	—
CHINA ch.	1(2), 2(73) 3(74), 4(76) 5(77)	—	6(89), 7(5) 8(6), 9(16) 10(17), 11(10) 12(11)	—	13(21) 14(22) 15(23) 16(24) / 57(70)

TV CHANNEL SELECTION PROCEDURE

You can customize this special tuning system so that it will select only your personal choice of channels. When the Hi-Fi Monitor Receiver leaves the factory, all possible channels are in channel memory.
You can delete a channel from channel memory by tuning it in and then pressing the ERASE button. You can add a channel to channel memory by tuning it in with the channel call keys and then pressing the ADD button.
Press the CHANNEL keys marked "+" and "—" to scan through the channels that are currently in channel memory.





CHANNEL MEMORY SETTING

Channel memory enables you to set the Hi-Fi Monitor Receiver to your personal preferences among the channels available in your area. (If necessary, open the control panel door and set the CHANNEL PLAN selector switch to the U.S. TV, U.S. CATV or PAL/SECAM position, as appropriate.) Please refer to your local TV or cable program guide. Follow the procedures below to customize channel memory to your requirements. Set the FUNCTION selector to TV position and select the PAL/SECAM AREA or U.S. mode using the CHANNEL PLAN selector switch.

Removing Channels from Channel Memory

1. Use the CHANNEL "+" or "—" key to tune in the channel that you wish to delete from channel memory.
2. Press the ERASE button.
3. Repeat the above steps to delete additional undesired channels. You may add and delete channels as desired.

Putting Channels into Channel Memory

1. Turn on the Hi-Fi Monitor Receiver.
2. Select a channel by pressing the digit keys on the remote control unit.
3. Press the ADD button to put the currently selected channel into memory.
4. Now you can recall your desired channels by using the 10 channel call keys or the CHANNEL "+" and "—" keys.

OTHER MEMORY FEATURES

The Hi-Fi Monitor Receiver also stores many other settings related to day-to-day operation. When you turn the set on, it comes up with your previous channel and volume settings. It also can save previous picture quality settings.

STEREO RECEPTION [U.S. only]

1. When a stereo broadcast is received, a sign such as "TV 14 STEREO" appears on the screen.
2. Press the MTS key of the remote control unit to receive the audio program in stereo. As channels are changed the set will automatically switch from mono to stereo according to the broadcast signal condition.

SAP (SECOND AUDIO PROGRAM) RECEPTION [U.S. only]

The Second Audio Program is a monaural channel provided for within the BTSC (Broadcast Television Systems Committee) standard. Transmission of the SAP channel is at the option of the local broadcast station and may not be present along with the stereo broadcast signal.

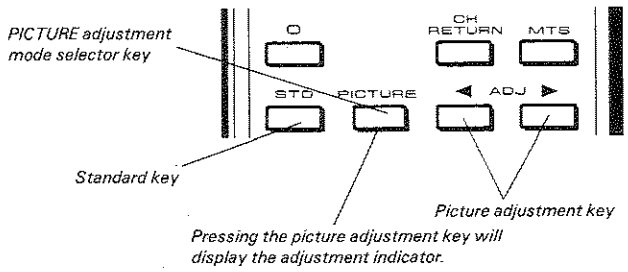
- When a SAP broadcast is received, you can select one of the audio reception modes listed in the following table. The current mode is displayed on the screen.

Audio Reception Mode Display (selected by the MTS key of the remote control unit) [U.S. only]

Mode selected \ Broadcasted mode		MONO	STEREO	MONO + SAP	STEREO + SAP
MAIN	Display	TVoo	TVoo STEREO	TVoo SAP	TVoo STEREO-SAP
	Mode	MONO	STEREO	MAIN (MONO)	L,R
SAP	Display	TVoo	TVoo STEREO	TVoo SAP	TVoo STEREO-SAP
	Mode	MONO	STEREO	SAP (MONO)	SAP (MONO)
MAIN/SAP	Display	TVoo	TVoo STEREO	TVoo SAP	TVoo STEREO-SAP
	Mode	MONO	STEREO	L.MAIN R.SAP	L.MAIN R.SAP
MONO	Display	TVoo	TVoo	TVoo	TVoo
	Mode	MONO	MONO	MAIN (MONO)	MAIN (MONO)

PICTURE FINE ADJUSTMENT

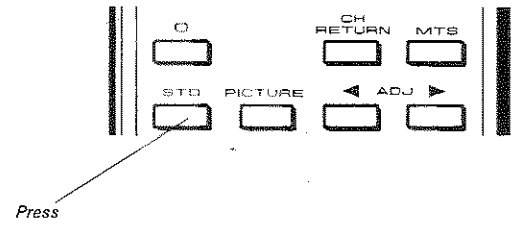
Use the picture adjustment controls on the front panel for basic picture adjustment. If even finer picture adjustment is desired, use the remote control as follows:



First, select the source (TV, VIDEO DISC, VIDEO) using the Function selector key. If you select a TV broadcast, also select the channel.

1. **Press the PICTURE adjustment mode selector key and select the items to be adjusted.**
2. **Press the adjustment (◀ ADJ ▶) key.**

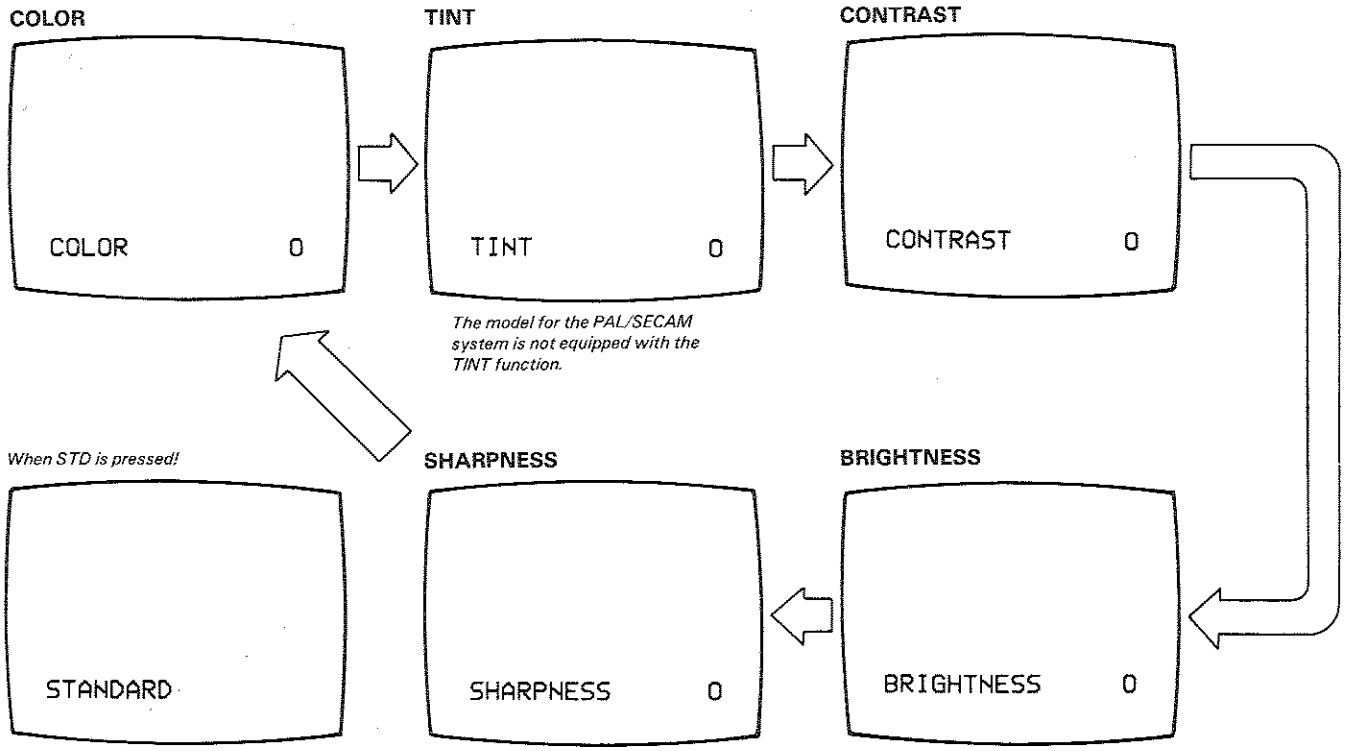
Change the displayed value using the ◀ or ▶ key. (The range of adjustment is between −31 and +32.)



- This unit has been adjusted to standard picture adjustment values at the time of shipping. (On PAL system, TINT mode is not available.)

> ***NOTE:***
> *When a monochrome broadcast (without color burst) is received with the COLOR system set to AUTO, TINT and COLOR picture quality adjustment may not be possible, depending on the signal from the broadcast station.*

SCREEN INDICATIONS FOR PICTURE ADJUSTMENT



NOTE

By pressing the PICTURE adjustment mode selector key, the adjustment items will be displayed in the sequence shown above. If you do not adjust an item, the display of that item will disappear after about 4 seconds.

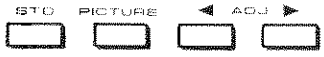
The last picture adjustment will remain memorized even after the unit is switched OFF.

PICTURE MEMORY

The PICTURE MEMORY feature allows you to adjust picture quality to desired settings and memorize those settings. Two memory positions are provided to allow you to store two picture quality settings in accordance with differing source signal qualities and your own preferences. By storing those settings, you can call them back later when desired.

1. Press one of these keys to select the video source.

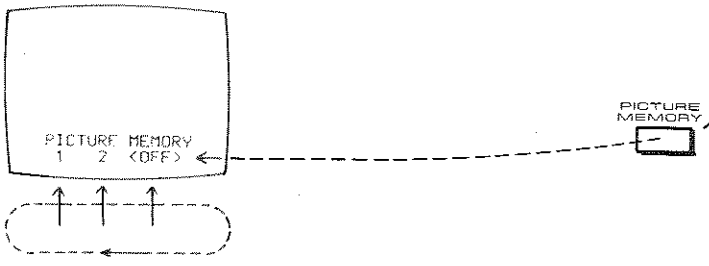
2. Use these keys to set the picture quality as desired.

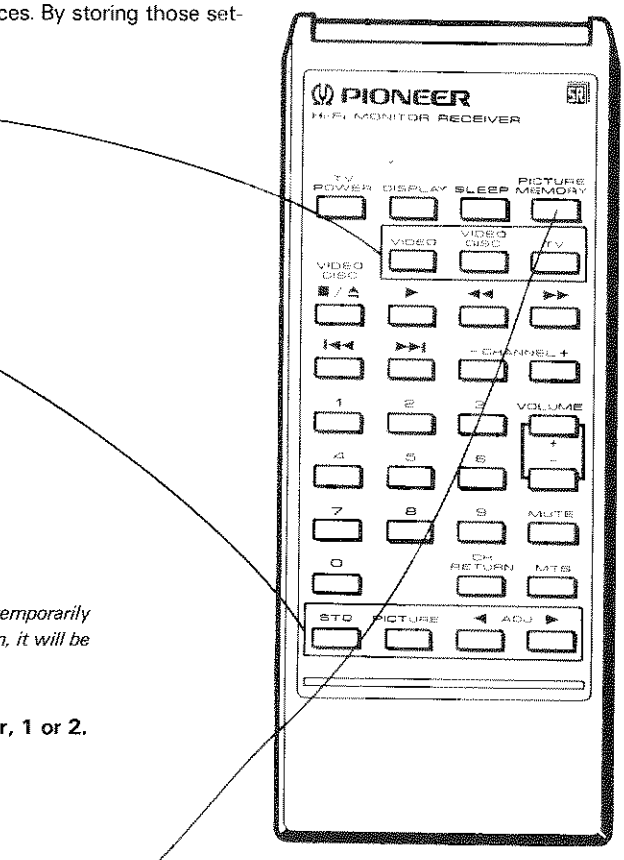


→COLOR →TINT (Except PAL/SECAM) → CONTRAST →
SHARPNESS ←BRIGHTNESS ←

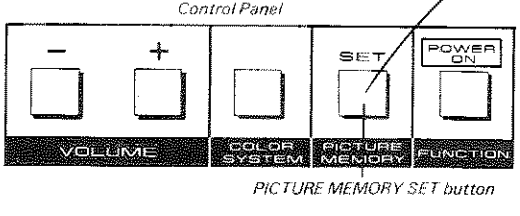
NOTE:
About 4 seconds after selecting the picture quality, the adjustment mode will temporarily disappear, but when the PICTURE adjustment mode selector key is pressed again, it will be displayed again.

3. Use the PICTURE MEMORY recall key to select the desired number, 1 or 2. The PICTURE MEMORY mode display appears on the screen.





4. Press the picture MEMORY SET button.
The indicator color will change from red to green, signaling that the picture memory has been stored.



Recalling the picture memory

Press the PICTURE MEMORY key to select the desired number

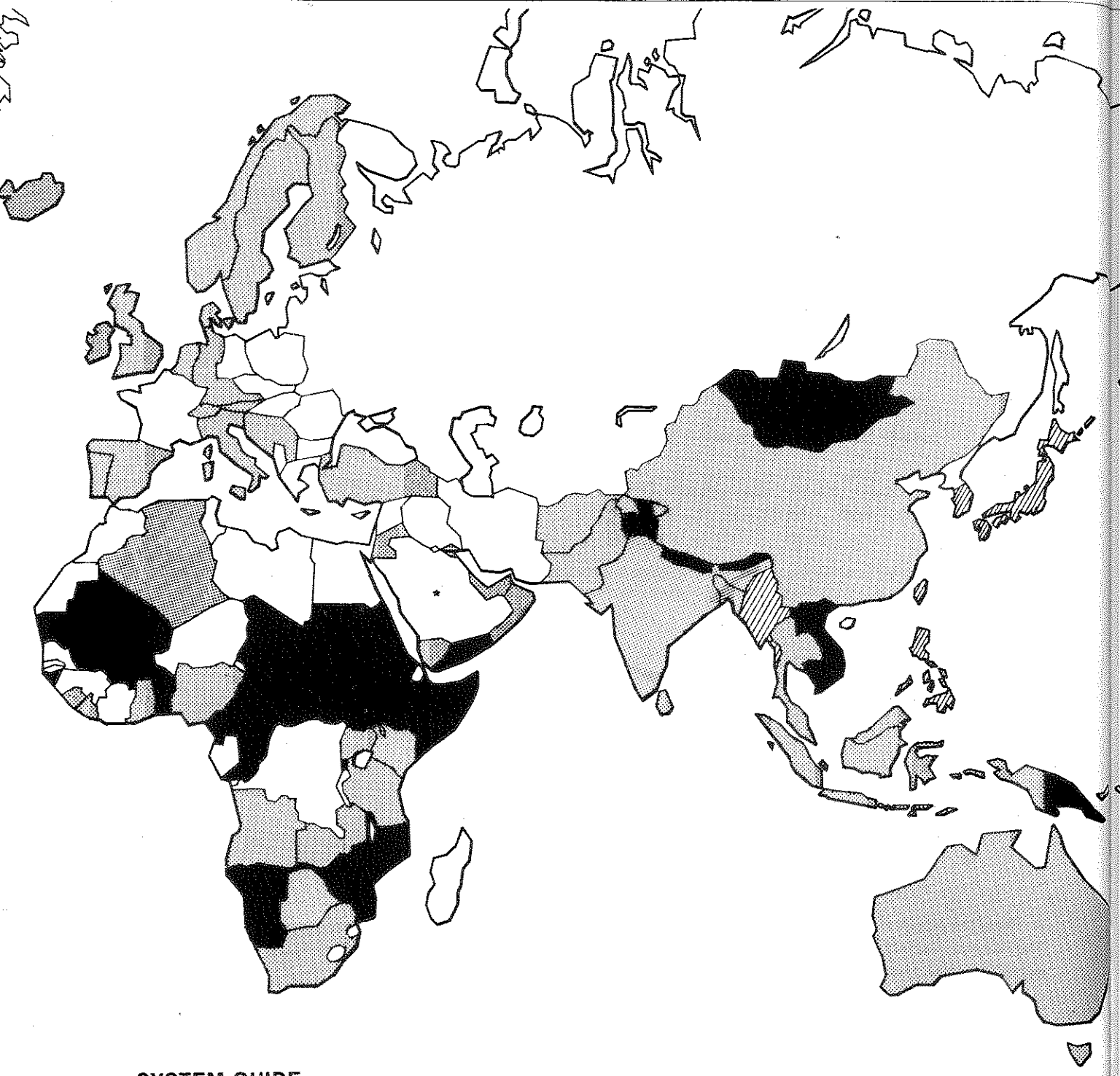
PICTURE MEMORY

┌ 1 → 2 → <OFF > ┐
└ ┘

Changing the PICTURE MEMORY using the remote control unit

To slightly change the content of the called PICTURE MEMORY, make adjustments using the PICTURE adjustment mode selector key and adjustment [◄ ADJ ►] keys. The initial picture memory data will remain unchanged, enabling you to recall it again when necessary.

WORLD TV SYSTEM



SYSTEM GUIDE

PAL SECAM NTSC

*Saudi Arabia also has PAL broadcasts.

sent, not all television receivers used throughout the world today can be used in all countries due to fference in signal formats utilized in those respective countries. These signal systems include the ts NTSC, NTSC 4.43, PAL B/G, PAL I, and SECAM. NTSC is a typical signal system; one of its cteristics is that it allows reception of color or black and white signal programs on either a black and or color television set. It has 525 scanning lines, with a vertical-horizontal screen aspect ratio of 3:4, transmission speed of thirty frames per second. In West Germany, Great Britain, and China, the ignal system is used, while in France, U.S.S.R., East Germany, and countries of the Middle East the M system is used. In the PAL and SECAM systems, the number of scanning lines is 625, and 25 s are transmitted each second.

TROUBLESHOOTING

If you should experience trouble with your Hi-Fi Monitor Receiver, perform the following checks before consulting a PIONEER authorized service center. The problem may lie with a mistake in operating the display. Also, the trouble may be the result of causes outside the display itself. When checking the display, also check all other video components and electrical appliances being used at the same time.
If you cannot solve the problem yourself after checking the items listed below, then contact the nearest PIONEER authorized service center or your dealer.

PROBLEM	POSSIBLE CAUSES AND ADJUSTMENTS
NO PICTURE.	Power plug is disconnected: **Make sure the power cord is plugged in securely.** MAIN POWER switch is off: **Turn on the MAIN POWER switch, then press the TV POWER switch on the remote control unit or the POWER ON switch on the Hi-Fi Monitor Receiver.** Plug connected to Video Input terminal is disconnected: **Connect plugs securely.**
COLOR IS WASHED OUT.	The COLOR is not adjusted correctly: **Adjust COLOR according to PICTURE ADJUSTMENT.**
POOR COLOR TINT.	The TINT is not adjusted correctly: **Adjust TINT according to PICTURE ADJUSTMENT.**
STATIC SPOTS IN PICTURE	Noise interference from automobiles or neon signs is influencing the TV reception: **Try changing the height or direction of the TV antenna, or move the antenna farther away from roads.**
GHOST IMAGES ON THE SCREEN	The television antenna is receiving signals along two paths. This is called "multipath distortion", signals are entering the antenna directly, and also after being bounced off nearby tall buildings or mountains. Or, the direction of the antenna may have been changed by strong winds: **Try changing the height and direction of the antenna.**
COLORED STRIPES ON THE SCREEN.	Interference is being received from other radio or TV signals: **Try changing the height and direction of the antenna. Try changing to a coaxial VHF antenna cable, since this kind of cable is less likely to be influenced by other signals.**
PICTURE IS UNCLEAR.	The plug connected to the Video Input terminal is loose: **Connect all plugs securely.** The TV antenna or antenna cable may be worn out, cut, or otherwise damaged: **Check the antenna and cable for wear or damage. Replace them if necessary.**
POOR PICTURE OR COLOR QUALITY	When an optional speaker system installed near the Hi-Fi Monitor Receiver is moved, the monitor is receiving interference from the speaker system: **Install the Hi-Fi Monitor Receiver farther away from the speaker system. Set the Hi-Fi Monitor Receiver MAIN POWER switch to off, wait for one hour, then turn it on again.**
REMOTE CONTROL UNIT DOESN'T FUNCTION.	If a strong fluorescent or other light strikes the remote control sensor, the built-in microcomputer may malfunction: **Change the position of the Hi-Fi Monitor Receiver and your room lighting. Replace both batteries together about once every six months.**
WHEN TURNING POWER ON, A DIFFERENT CHANNEL IS DISPLAYED FROM THE CHANNEL BEFORE TURNING POWER OFF.	Either the MAIN POWER switch was turned off, or the power cord plug was disconnected from the wall outlet within one minute after switching to the desired channel: **Don't turn off the MAIN POWER switch until about 3 seconds have elapsed after changing channels. This holds true also for changes in sound volume and function selector.**
TV BROADCAST IS NOT RECEIVED.	The channel plan selector is not in the correct position. **Check the channel allocation. (See pages 14.)**

SPECIFICATIONS

DISPLAY SECTION

Type ..... Colour TV
Reception 16 system ..... NTSC/PAL/SECAM trident model
PAL (I, B/G, D/K), SECAM (I, B/G, D/K, K1), NTSC M, NTSC 3.58 (I, B/G, D/K), NTSC 4.43 (I, B/G, D/K) broadcast reception, NTSC-50 Hz, PAL-60 Hz playback.
Screen size/visual size ..... 29" flat square tint
Input terminals ..... 2 video input systems, S-VIDEO input system, 2 audio input systems
Output terminals ..... Video output (recording), Audio output (FIXED) external speaker terminals,
Input signal ..... Video signal: 1.0 Vp-p ±0.2 Vp-p (75 ohm load)
Audio signal: 450 mVrms
Input impedance ..... Video input: 75 ohm ±10%
Audio input: 20 k ohm or more
Input signal polarity ..... Synchronized negative
Horizontal resolution ..... 700 lines for NTSC system (Video signal input)
Output terminal signal ratings:
Output terminals ..... Video signal: 1 Vp-p (75 ohm load)
Audio signal: 450 mVrms (100% modulation)

TUNER SECTION

Circuit type ..... Frequency synthesizer
Reception channels NTSC
VHF { AIR ..... ch. 2 — ch. 13
CABLE ..... ch. A-6 — ch. I, ch. J — ch. W
UHF ..... ch. 14 — ch. 69
Reception channels PAL
VHF { AIR ..... CCIR; ch. 2 — ch. 12
Italia: A—G
CABLE ..... X—Z+2, S_1— S_{10}, S_{11}—S_{20}
UHF ..... ch. 21 — ch. 69
Reception channels SECAM
SN ratio ..... MONO (Black Burst); 67 dB
STEREO (Black Burst); 67 dB
Stereo separation (300 Hz Black Burst) ..... 32 dB
Distortion (1 kHz Black Burst) ..... MONO; 0.5%
STEREO; 0.5%
Antenna terminals
VHF/UHF terminals ..... F-type connector 75 ohm UNBAL (VHF, UHF MIXED)
Antenna impedance ..... 75-ohm coaxial VHF/UHF

AMPLIFIER SECTION

Effective output (both channels driven, 1 kHz) ..... 10 W + 10 W
External speaker impedance ..... 8 to 16 ohm
Headphone output 1

SPEAKERS SECTION (per channel)

System ..... 2-way 3-speaker system
Loudspeakers:
Woofer ..... 3" (8 cm) cone type ×2
Tweeter ..... 1-3/16" (3 cm) ×1

ELECTRICAL SECTION, MISCELLANEOUS

Power requirements
Multi-voltage model
~AC 110 V—127 V/220 V—240 V (switchable), 50/60 Hz
Power consumption ..... 180 W
External dimensions ..... 715 (W) ×565 (H) ×511 (D) mm
28-1/8 (W) ×22-10/16 (H) ×19-15/16 (D) inches
Weight of main unit ..... 43.1 kg (95 lb)

ACCESSORIES

Operating Instructions 1
Warranty card 1
Remote control unit 1
"AAA", UM-4 (IEC R03 1.5V) dry cell batteries 2
PAL —→F plug convert cable 1

NOTE:
Specifications and design subject to possible modifications without notice, due to improvement.

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